

Data Server Subsystem Data Distribution CSCI

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Data Distribution Overview



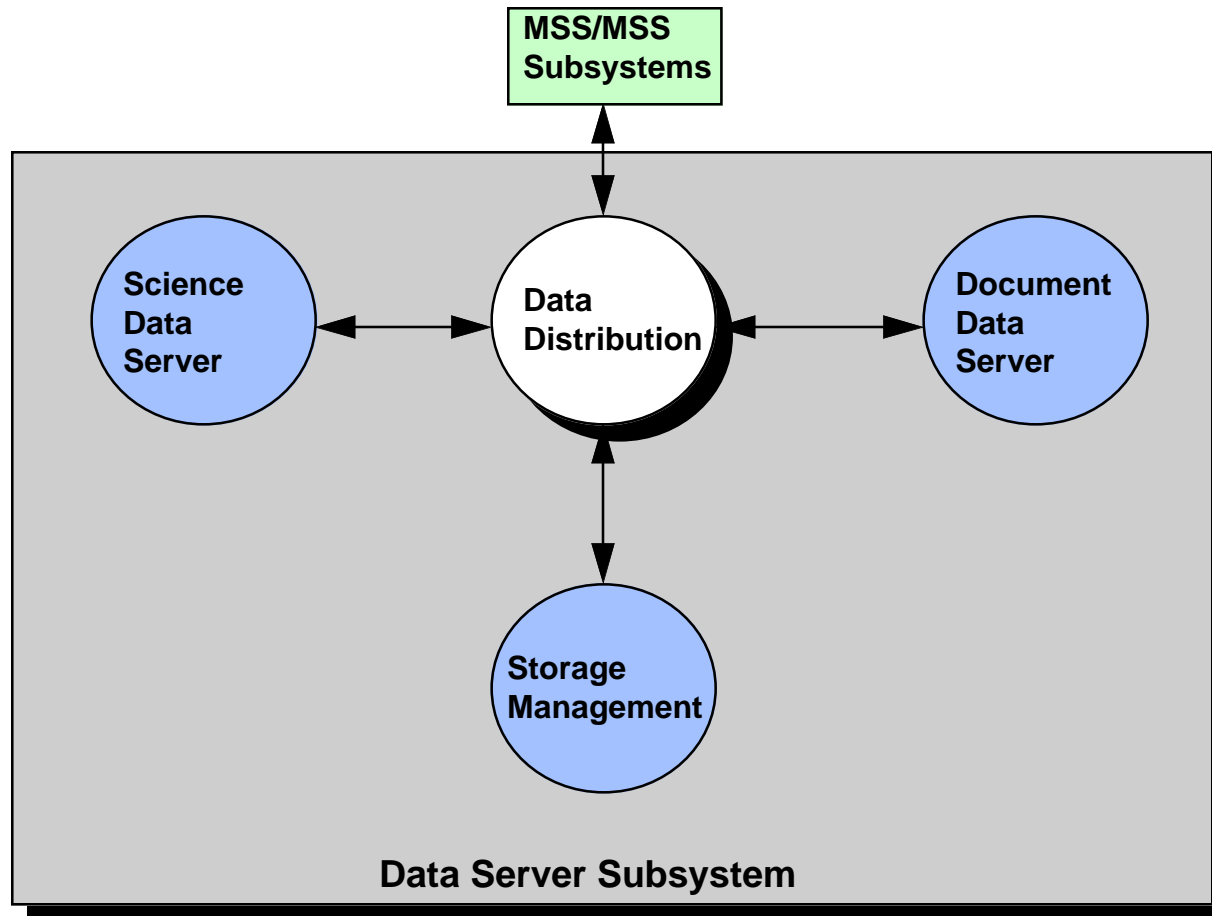
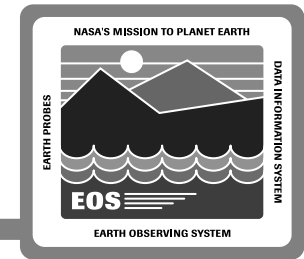
Description

- Orchestrates the generation of distribution products
- Supports operator view into and management of distribution activities

Release A supports

- Electronic pull
- Electronic push
- 8mm magnetic tape
- 6250 bpi 9-track magnetic tape
- CD-ROM
- Automated generation of packing slips
- Electronic notification of request completion

Data Distribution Context Diagram



Data Distribution Features



Configurability

- Identification of the device types (e.g., tape, CD) supported by the particular site is specified in an editable text file, not hardcoded

Extensibility

- Addition of new device types accommodated without changes to existing code

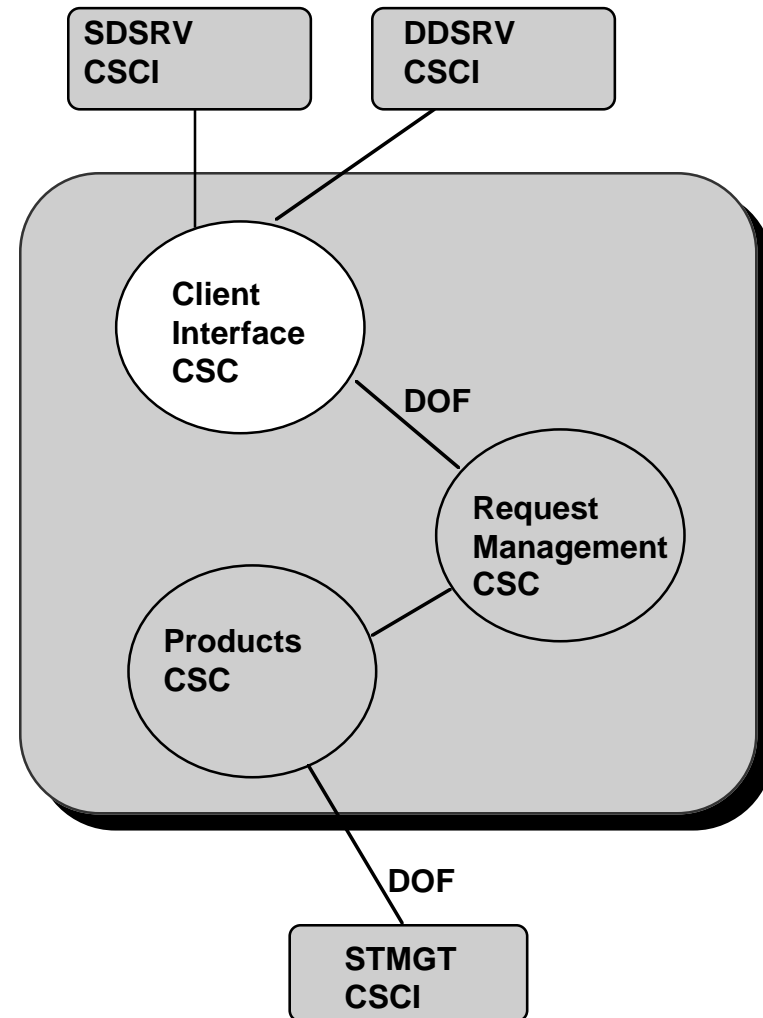
Data Distribution CSCs



“Client” Interface

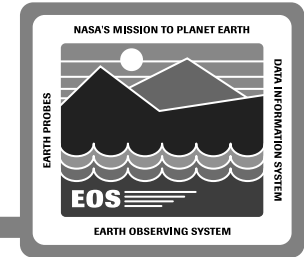
Request Management

Products



Data Distribution

“Client” Interface CSC

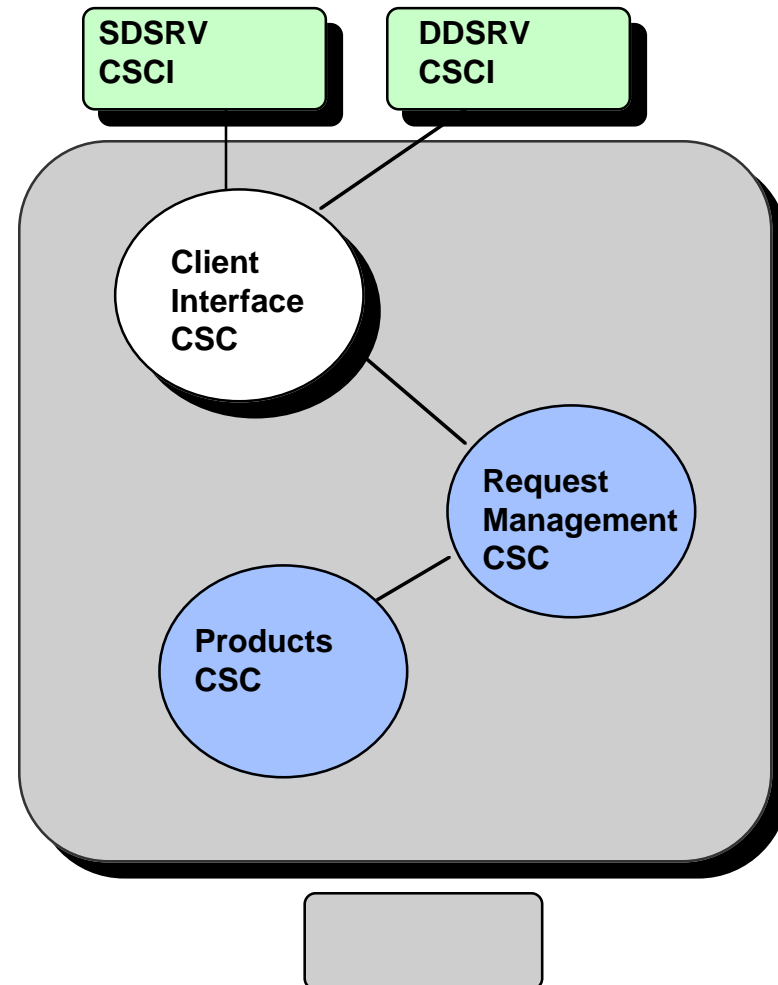


Purpose:

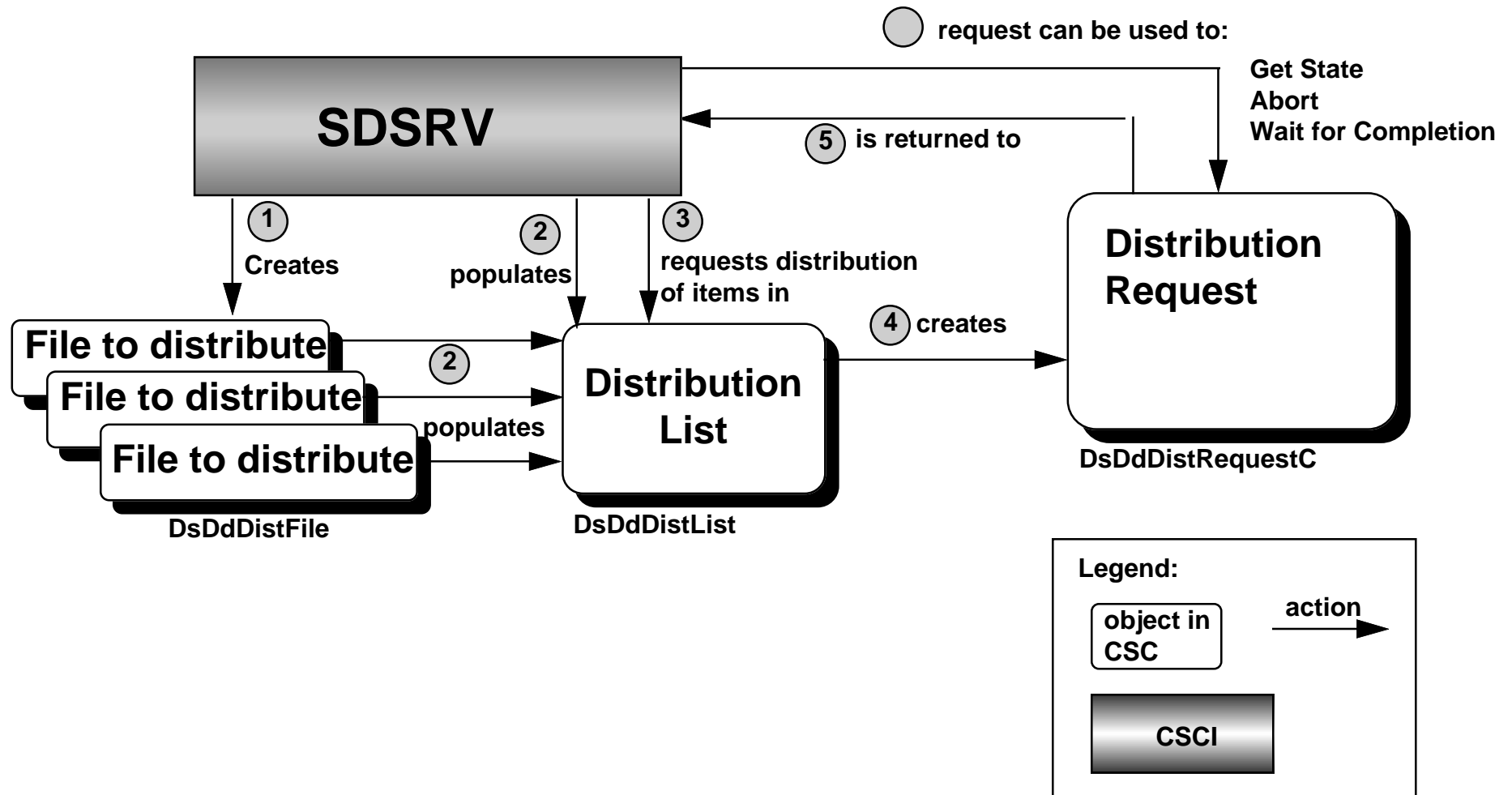
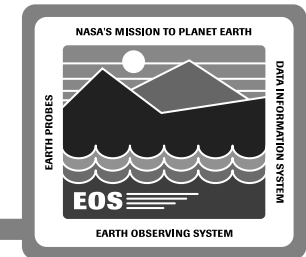
- Provides clients with mechanisms to initiate, track, and modify distribution processing

Services

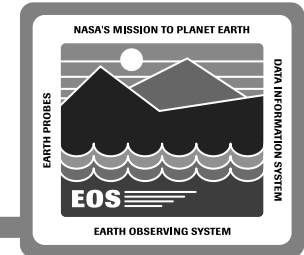
- Distribute - returns asynchronously
- Abort
- Wait for completion
- Get state
- Set priority
- Inventory requests



Data Distribution Client Interface Internals



Data Distribution Request Management CSC

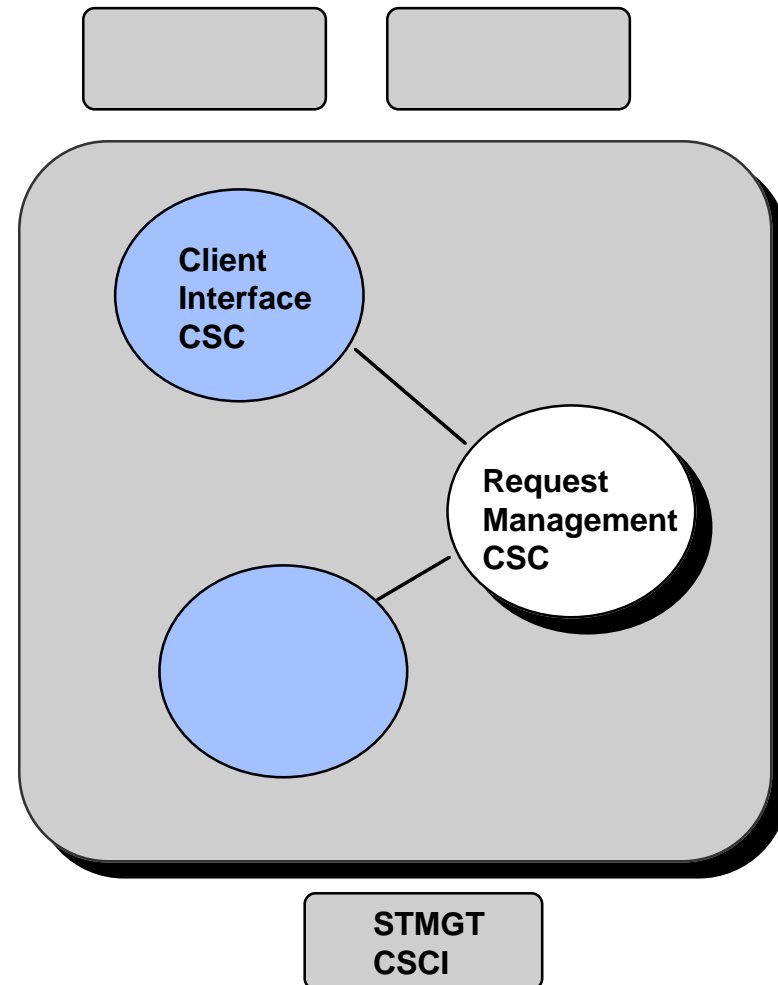


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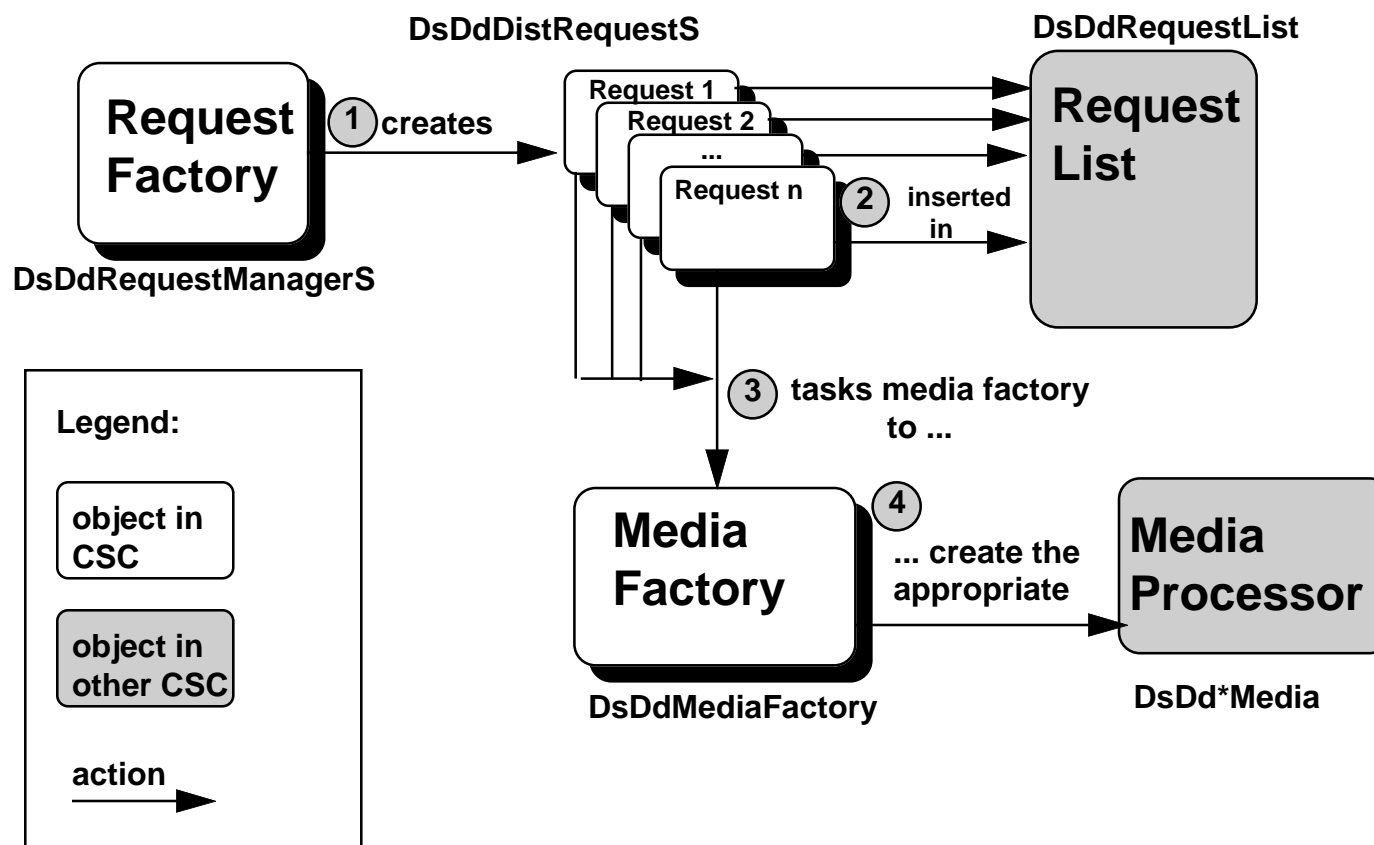
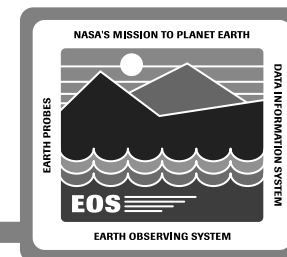
- Manage processing of distribution requests

Services

- Create distribution request - each distribution request is run in its own thread
- Wait for completion
- Set priority
- Get state
- Abort
- Inventory requests



Data Distribution Request Management Internals



Data Distribution Products CSC

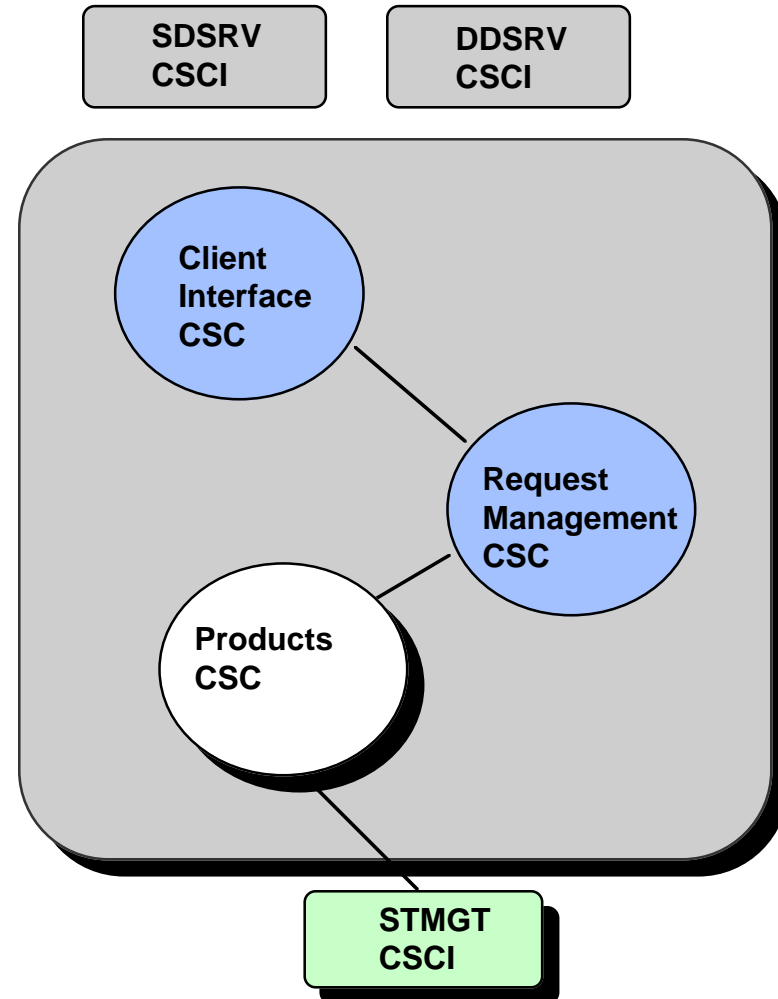


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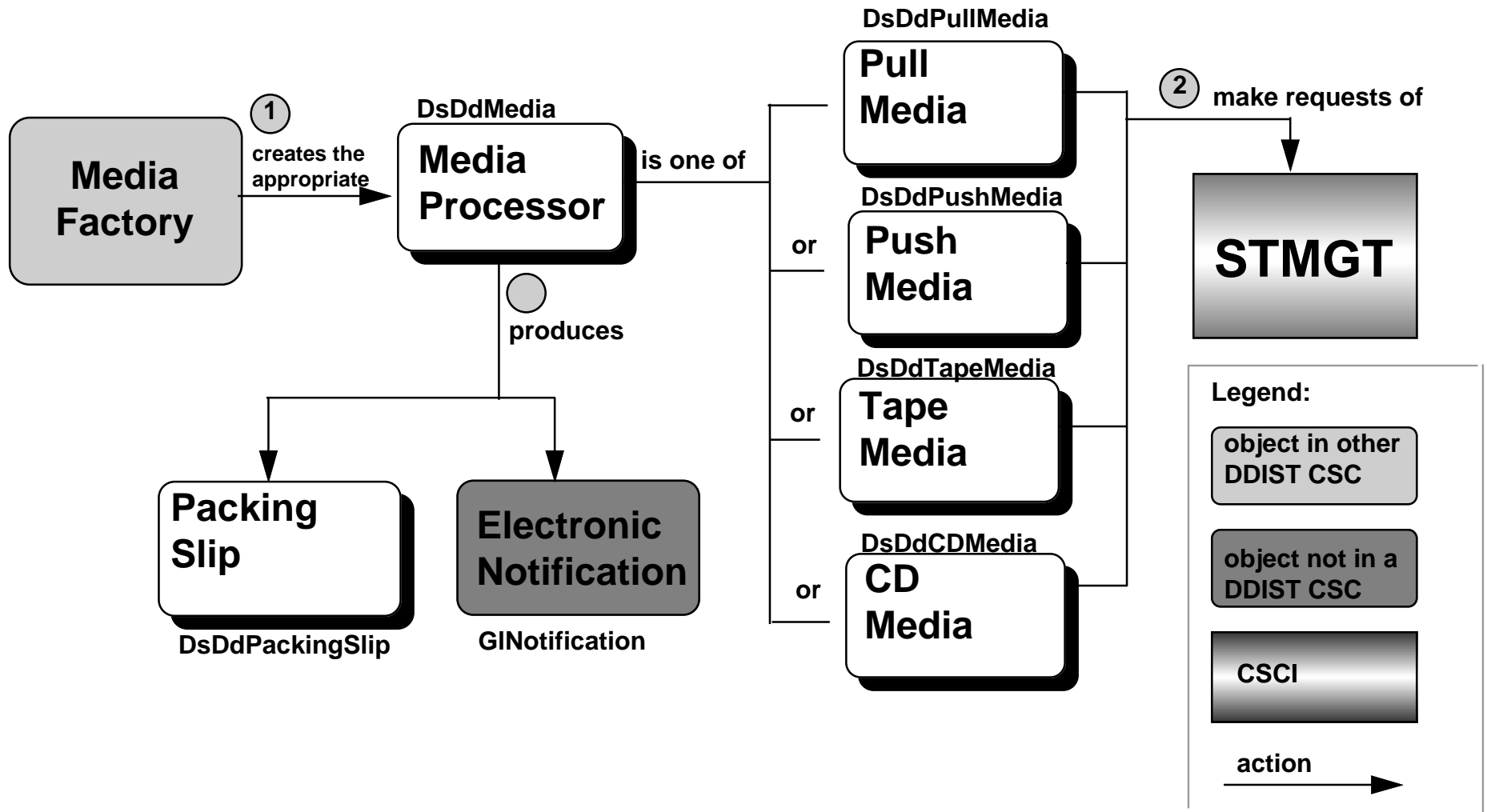
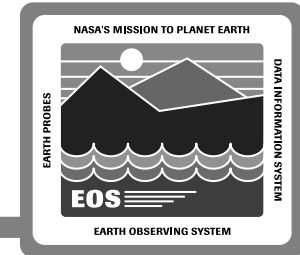
- **Generate the products of a distribution:**
 - media
 - packing slip
 - electronic notification

Services

- **Service the request - uses private services which are polymorphic by media type**

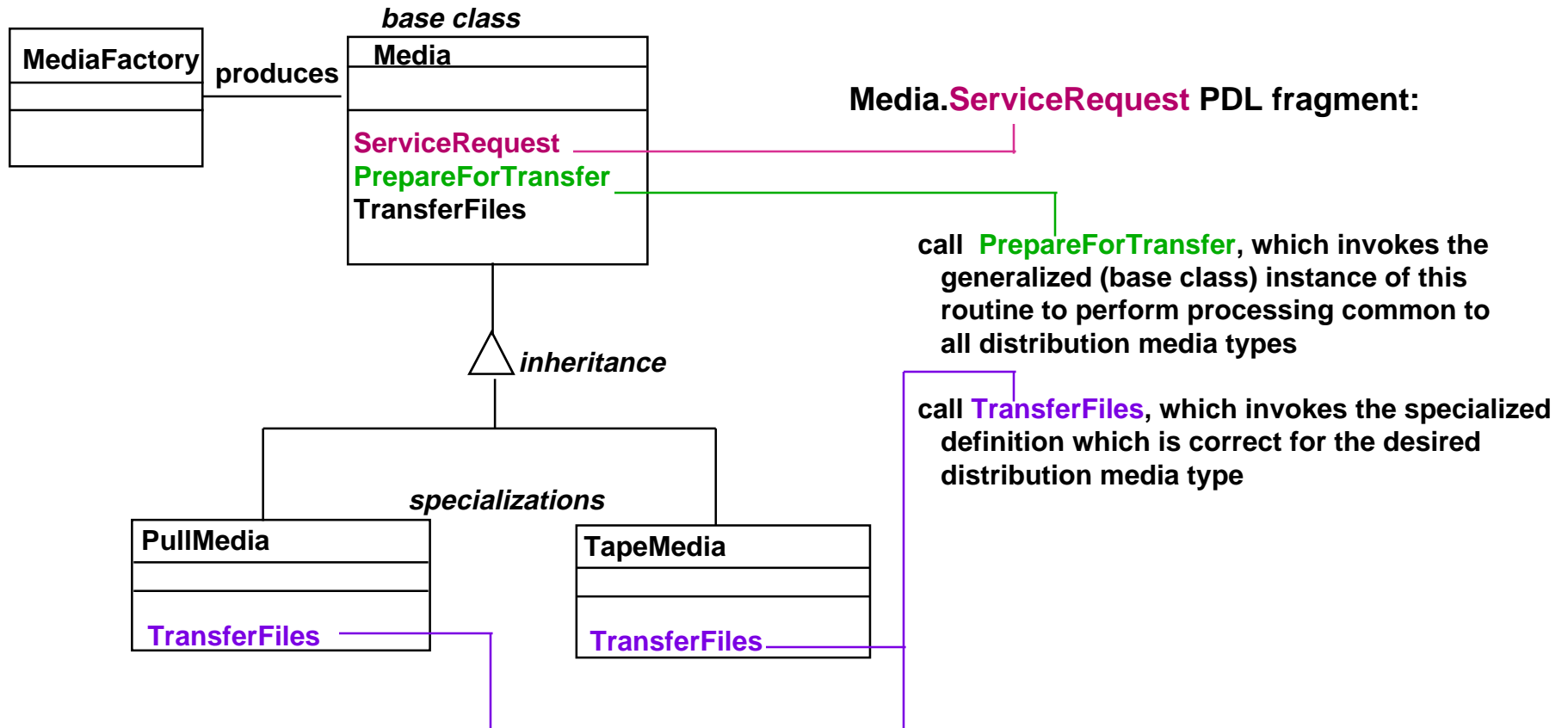


Data Distribution Products Internals

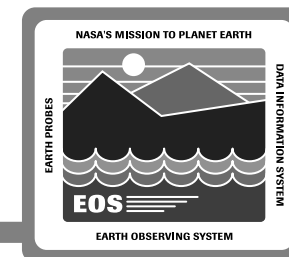


Products CSC

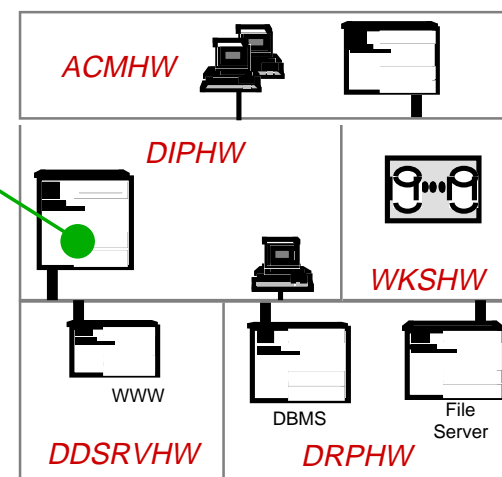
Media Polymorphism



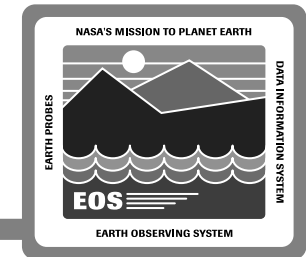
Data Distribution CSC Mapping



- 1 process, **Distribution Server**, composed of:
 - Request Manager CSC
 - Products CSC
- 1 library, the Client Interface CSC



Data Distribution CSC Interactions on Acquire



Ref. DID 305:
 7.4.2 "Electronic Pull of Data"
 7.4.3 "Electronic Push of Data"
 7.4.4 "Physical Distribution to Tape"

